AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1–5 (Cancelled)

Claim 6 (Currently Amended): The method of claim [[1]] 11, further comprising[[:]] updating the routing information to set an overload bit of a link state prefix associated with the routes when the count exceeds the export limit.

Claims 7-10 (Cancelled)

Claim 11 (Currently Amended): A method comprising:

receiving at a network device an export limit command from a client;

counting, in response to the export limit command, a number of routes exported from an exterior routing protocol process executing on a processor of the network device to an interior routing protocol process executing on the network device; and

when the number of routes exported from the exterior routing protocol process to the interior routing protocol process exceeds an export limit, operating the network device in an overload condition in which the processor of the network device: (i) updates routing information of the interior routing protocol to clear the routes previously exported from the exterior routing protocol, (ii) rebuilds the routing information of the interior routing protocol by updating the routing information of the interior routing protocol to associate interior routes with set a maximum metric that defines a maximum distance for the interior routes from the network device to neighboring network devices, and (iii) advertises the updated routing information to another network device.

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Claim 12 (Original): The method of claim 11, further comprising:

receiving from the client an export limit indicative of a maximum number of routes that can be exported from the exterior routing protocol process to the interior routing protocol process;

comparing the counted number of routes to the export limit; and

rejecting additional routes exported from the exterior routing protocol process to the interior routing protocol process when the counted number of routes exceeds the export limit.

Claim 13 (Previously Presented): The method of claim 12, further comprising waiting for intervention from the client before accepting the additional routes from the exterior routing protocol.

Claim 14 (Cancelled).

Claim 15 (Original): The method of claim 11, further comprising updating routing information of the network device when the count exceeds the export limit to clear the routes exported from the exterior routing protocol.

Claims 16-17 (Cancelled).

Claim 18 (Currently Amended): A system comprising:

a management interface to receive a command that specifies an export limit;

a control unit that limits a number of routes exported from an external routing protocol executing on a network device to an interior routing protocol executing on the network device in accordance with the export limit; and

a plurality of instances of the interior routing protocol executing on the system,

wherein the control unit separately limits the number of routes exported to each of the instances,

wherein the control unit includes a plurality of prefix counters to maintain respective counts for the number of routes exported to each of the instances, and

wherein the control unit identifies an instance of the interior routing protocol to which routes were exported, accesses the respective prefix counter to compare the stored count with an associated prefix limit, and when the stored count exceeds the associated prefix limit, operates the network device in an overload condition in which the control unit of the network device: (i) updates routing information of the identified instance of the interior routing protocol to clear the routes previously exported from the exterior routing protocol, (ii) rebuilds the routing information of the identified instance of the interior routing protocol by updating the routing information of the identified instance of the interior routing protocol to set a maximum metric that defines a maximum distance for the interior routes of the identified instance of the interior routing protocol from the network device to neighboring network devices, and (iii) advertises the updated routing information to another network device. ~~rejects additional routes exported from the exterior routing protocol to the identified instance based on the comparison.~~

Claim 19-20 (Cancelled)

Claim 21 (Currently Amended): The system of claim 18, ~~further including an~~ wherein the exterior routing protocol ~~that~~ supports a larger number of routes than the interior routing protocol.

Claim 22 (Original): The system of claim 21, wherein the control unit communicates with an internet service provider via the exterior routing protocol.

Claims 23-25 (Cancelled).

Claim 26 (Currently Amended): The system of claim 18,

wherein the system comprises a router, and

wherein the router includes the management interface and the control unit.

Claim 27 (Currently Amended): A <u>non-transitory</u> computer-readable medium comprising instructions to cause a processor to:

    <u>receiving at a network device an export limit command from a client;</u>

    <u>counting, in response to the export limit command, a number of routes exported from an exterior routing protocol process executing on a processor of the network device to an interior routing protocol process executing on the network device; and</u>

    <u>when the number of routes exported from the exterior routing protocol process to the interior routing protocol process exceeds an export limit, operating the network device in an overload condition in which the processor of the network device: (i) updates routing information of the interior routing protocol to clear the routes previously exported from the exterior routing protocol, (ii) rebuilds the routing information of the interior routing protocol by updating the routing information of the interior routing protocol to set a maximum metric that defines a maximum distance for the interior routes from the network device to neighboring network devices, and (iii) advertises the updated routing information to another network device.</u>

    ~~present a management interface to receive a command from a client;~~

    ~~receive a command, from the client through the management interface, to specify an export limit for routes exported from an exterior routing protocol executing on a network device to an interior routing protocol executing on the network device;~~

    ~~maintain respective counts of routes exported from an exterior routing protocol executing on the network device to a plurality of instances of an interior routing protocol executing on the network device; and~~

    ~~identify one of the instances of the interior routing protocol to which the routes were exported;~~

    ~~compare the respective count for the identified one of the instances to an export limit; and~~

    ~~reject additional routes to be exported from the exterior routing protocol to the identified one of the instances based on the comparison.~~

Claims 28–38 (Cancelled)

Claim 39 (Previously Presented): The system of claim 26, wherein the management interface receives the command from a remote client.

Claim 40 (Previously Presented): The system of claim 39, wherein the remote client comprises one of a human user and an automated script.

Claim 41 (Cancelled)